

ACHIEVEMENT OF SECONDARY SCHOOL PUPILS IN TWELVE CLASSICS IN LITERATURE

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Achievement of Secondary School Pupils in Twelve Classics in Literature

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INTRODUCTION

In the secondary school in Indiana, the study of English is required during one-fourth of the pupils' time in the ninth, tenth, and eleventh grades and may be elected for two additional units of credit in the twelfth grade. Two phases of English are taught throughout these three (or four) years, the aims being: (1) the development of pupils' ability to speak and write correct idiomatic English; and (2) the development of pupils' ability to comprehend and appreciate literary selections for the sake of the intellectual and emotional enjoyment derived. The time is about equally divided between these two phases during the three (or four) years.

During the first three years of the high school English course, grammar, rhetoric, punctuation, and spelling are not treated as ends in themselves but are taught formally, or informally, as a means to accurate thinking and clear expression in oral and written work. The expressive phase of English is not taught apart from literary appreciation wholly. The literary types studied provide the stimulus for expression, and the oral class discussion and occasional written work correlate the whole content of the English course for the pupil.

A wide range of literature is taught in each of the ninth, tenth, eleventh, and twelfth years. The types include the short story, the novel, the drama, the essay, biography, and poetry. This study is limited to the study of literature in the secondary school.

Since one-eighth of all the time of the

pupil in English classes in the four-year secondary school is devoted to the study of literature, it would seem advisable and expedient to have some check on the achievement of the pupil in this field. This may be accomplished by making a random sampling of the progress made in the high schools of the state.

THE THREE PROBLEMS INVOLVED IN THIS STUDY

In order to study the achievement of high school pupils in literature, three problems were attempted as follows: (1) the first problem deals with the selecting of twelve classics commonly taught in the high schools of the state; (2) the second with the constructing of twelve objective tests to measure pupil achievement in these twelve classics; and (3) the third with the studying of pupil achievement from the results of these tests. The pupil achievement was studied from the point of view of: (1) the different grade levels; (2) large and small school enrollments; (3) long and short term schools; and (4) different geographical sections of the state.

CHAPTER I

THE NATURE OF LITERATURE AND THE AIMS IN TEACHING LITERATURE

No study involving the measure of achievement in literature could proceed without an understanding of the nature of the subject of literature and the objectives in teaching it; furthermore, tests could not be constructed to measure pupil comprehension in literature without defining the term comprehension. In this study the

term comprehension means the ability on the part of the reader to *interpret* as a unit all that the author presents in his production. Comprehension of a selection in literature implies the use of the imaginative faculty on the part of the reader to recreate the situations, scenes, and struggles depicted; and the ability to realize them vicariously according to the depth and variety of his own experience. As to the nature of literature in its restricted sense as it is used in this study, and of the aims in teaching it, the following expressions on these two points have been selected from two fields of study—literature and education:

Literature is an art of expression. The material which it employs is experience; or in other words, literature is the expression of life. Action, emotion, and thought are the three great divisions of life, and constitute experience. . . . It is obvious that literature makes its appeal to the individual mind and is intelligible only in so far as the individual is able to comprehend its language and interpret the experience there embedded. The reader's own experience is the key to literature.¹

Literature is the adequate expression of genuine and typical emotion. . . . Certainly the essentials of literature are the adequate embodiment of sincere and general feeling. Emotions are those inner sensations of pleasure, excitement, pain, or passion which are distinguished from the merely intellectual processes of the mind—from thought, perception, and reason.²

The object of reading literature is not only to understand it, but to experience it; not only to apprehend it with the intellect, but to comprehend it with the emotions.³

Conviction springs from the imagination, and the imagination is above all else the realizing faculty.⁴

To read fiction is certainly a pleasure; it is looked upon as no less important a means of intellectual development; while in the cultivation of the moral and spiritual sense the proper use of fiction is one of the most effectual and essential agencies today within the reach of men.

¹W. H. Hudson, *An Introduction to the Study of Literature*, p. 11.

²Arlo Bates, *Talks on the Study of Literature*, p. 6.

³Ibid., p. 110.

⁴Ibid., p. 19.

In other words the proper reading of fiction is from the standpoint of pleasure, of intellectual development, or of moral growth neither more nor less than a distinct and imperative duty.⁵

It is true that literature is the great repository of national and racial ideals and that one of the experience values of literature is that it leads to a revision of our attitudes.⁶

What power literature has to change or build attitudes operates only through realization of experience.⁷

The *Twenty-Fourth Year Book* of the National Society for the Study of Education in its discussion of the Teaching of Literature (in the high school) says:

Everything which contributes to the creative realization of experience, and nothing else, is to be justified.⁸

Farther on is found the statement that class-discussion in the literature recitation "should never be the giving of predigested information by the teacher. It must always be a sharing of real experience."

Under the caption "Literature as a means of fuller living" Dr. Sterling A. Leonard continues:⁹

The finest and most inclusive statement of the value of literature is probably that it may make our experience deeper, wider, and more satisfying . . . it may also help us, by combining the elements in our past experience, to live imaginatively in different times and countries, and in characters otherwise remote from our understanding and sympathy.

Mankind looks to literature for the expression of genuine, strong, healthy human emotion; emotion passionate, tragic, painful, the exhilaration of joy, or the frenzy of grief, as it may be; but always the emotion which under the given conditions would be felt by the healthy heart and soul, by the virile man and the womanly woman.¹⁰

The approach to literature for real experience and enjoyment must never be analytical and critical; it must always be co-operative, creative; it must be the

⁵Ibid., p. 202.

⁶H. Ward McGraw, *The Teaching of Literature*, p. 8.

⁷Ibid., p. 9.

⁸*Twenty-Fourth Year Book* of the National Society for the Study of Education, p. 150.

⁹Ibid., Part I, Chapter 6, 1925.

¹⁰Bates, *op cit.*, p. 20.

reader's attempt to put together out of his own past experience those pictures and sounds and odors the writer presents.¹¹

...but literature does not reach to its highest function unless its appeal to the intellect is the means of touching and arousing the imagination; because the end of all art is not the mind but the emotions.¹²

The reconstruction of human experiences provided in the readings (literature) should be suffused with all the color and warmth and beauty and tingle of life itself; with all the drabness, bleakness and ugliness of life itself; and with the whole gamut of human emotions. Lacking these things it is not life; not a reconstruction of actual human experiences; not a fit instrument for indirect observation and vicarious participation.¹³

Out of the fictitious book I get the expression of the life of the time; of the manners, of the movement, the dress, the pleasures, the laughter, the ridiculous of society—the old times live again and I travel in the old country of England. Can the heaviest historian do more for me?¹⁴

Thackeray here expresses all the lure for the "far-away" and "long-ago" which the normal mind craves—a craving best satisfied in literature by the historical novel.

From the feeble romances of Curwood and Wright, Myrtle Reed, and Gene Stratton Porter, the worst harm can be rooted out if only we lead pupils to see that they do not truly picture *cause and effect* in human affairs.¹⁵

One of the fundamental aims of English literature in the high school is social and ethical—to present to the student noble ideals, aid in the formation of his character, and make him more efficient and actively interested in his relations with and service to others in the community and nation.¹⁶

Literature preserves the ideals of a

¹¹Twenty-Fourth Year Book, *op. cit.*, p. 153.

¹²Bates, *op. cit.*, pp. 86-87.

¹³Franklin Bobbit, *Literature and General Reading*, p. 82.

¹⁴William Makepeace Thackeray, "Essay on Steele," *English Humorists*.

¹⁵Twenty-Fourth Year Book, *op. cit.*, p. 148.

¹⁶James F. Hosic, *Reorganization of English in the Secondary Schools*, p. 32.

people; and ideals—love, faith, duty, friendship, freedom, reverence—are the part of human life most worthy of preservation.¹⁷

With these inward things of the spirit (ambition, love, hate, faith, duty, freedom) literature is concerned—the motives and passions which, in spite of changing thought and action, remain essentially the same in human nature, making the whole world kin.¹⁸

William Wordsworth explained his purpose in writing to be:

...to console the afflicted, to add sunshine to daylight by making the happy happier; to teach the young and the gracious of every age to see, to think and feel, and therefore, to become more actively and securely virtuous.¹⁹

As a universal source of enjoyment for the utilization of leisure, literature affords universal values which cannot be neglected. The increasing facilities for reading make the study of literature of increasing importance in the secondary school.²⁰

What materials of education are available for the purpose of fulfilling appreciative and recreative functions? Literature, art, and music naturally come first to mind. Literature has been taught with this end in view for a generation at least.²¹

The ability to enjoy a drama of Shakespeare, a picture of Millet, or an opera of Wagner means the possibility of noble pleasure, of leisure time spent in such a way that inspiration and strength instead of possible waste, or even worse, degradation and weakness, result.²²

We read the papers for the news, we read a work of science for the facts and conclusions, but a work of literature... we read for the pleasure and the stimulus it affords us, apart from any other consideration. It exhibits such a play of mind and emotion upon the facts of life and nature as results in our own mental and spiritual enrichment and edification.²³

¹⁷William J. Long, *English Literature, Introduction*, p. 7.

¹⁸J. C. Metcalf, *English Literature*, p. 10.

¹⁹William Wordsworth, *Literary Criticism*, p. 48.

²⁰Alexander Inglis, *Principles of Secondary Education*, p. 440.

²¹W. C. Bagley, *Educational Values*, p. 220.

²²George D. Strayer, *A Brief Course in the Teaching Process*, p. 82.

²³Paul Hanus, *Educational Aims and Educational Values*, p. 14.

Literature supplies the explosive power of a higher emotion. . . . Good literature supplies good ideals of conduct, makes the good attractive and the base ugly.²⁴

The place, then, of literature in our common school education is in spiritualizing life, letting light into the mind, inspiring and feeding the higher forces of human nature.²⁵

Literature selects incidents, types, scenes in nature and human life, and idealizes them. . . . Through it runs the inspiration and the justification of moral clash and struggle, and in the triumph of the ideal is recorded the distinction between the transitory and the eternal. Literature thus becomes the guide and inspiration in times of stress and strain, a comforter in affliction, a balancing power in times of triumph and victory. The purpose of studying great literature is to preserve and sustain the hope, the thought, the faith, that in the long, long purposes and processes of time, truth must prevail, and right not wrong, must dominate the universe.²⁶

Literature takes first rank in value as a medium for ethical instruction. . . . History and literature are the subjects in the curriculum that offer the best, because most natural, field for the training of moral judgments, for the moving influences of ideals, and for deepening of sympathy and insight.²⁷

SUMMARY

A digest of the above excerpts warrants the following deductions as clearly defined aims and purposes for the teaching of literature:

- (1) To give pleasure and enjoyment.
- (2) To develop the imagination.
- (3) To widen and deepen experiences of life.
- (4) To set up standards and ideals of character with the hope that they will function in life.
- (5) To help pupils to adjust themselves to life's problems.
- (6) To broaden the sympathies of pupils.
- (7) To blot out the barriers raised by

²⁴George R. Carpenter, Franklin T. Baker, and Fred N. Scott, *The Teaching of English in the Elementary and Secondary Schools*, p. 162.

²⁵H. E. Scudder, *The Place of Literature in School*, p. 31.

²⁶John S. Welch, *Literature in the School*, pp. 26-30.

²⁷M. C. Sadler, *Moral Instruction and Training in Schools*, Vol. I, p. 209.

strange times and places and to emphasize human brotherhood.

- (8) To increase broadmindedness.
- (9) To stimulate ambition, initiative, and all traits which lift man above the brute creation.
- (10) To help pupils to realize the "Seven Cardinal Principles" of education.

CHAPTER II

PROBLEM ONE—DETERMINING THE SELECTION OF THE TWELVE CLASSICS AND THE DATA TO BE TESTED ON EACH CLASSIC

FIVE FACTORS DETERMINING THE SELECTION OF THE TWELVE CLASSICS

In selecting the classics for the study, it was deemed necessary to limit the field of literature to three types—the novel, the drama (Shakespearian), and the long narrative poem.

Range.—Since the range included pupils from grades nine to twelve inclusive, five novels, five dramas (Shakespearian), and two long narrative poems were determined upon.

Specific Knowledge of Classics Taught in the State.—To insure a sufficient number of pupils for performance on the tests, it was necessary to know what classics were taught in the state. Since the Tentative Course of Study in English for Secondary Schools in Indiana,¹ was an official guide, the classics listed here fixed our limits. Specific data given in the study by Mary Dye Beach² were found to be very helpful at this point. Mrs. Beach listed the classics taught and the grade placement of each for a random sampling of twenty-five per cent of the high schools of Indiana, taking an equal per cent from high schools of ten sizes (determined by enrollment) with a range from fewer than fifty pupils to five hundred pupils.

The Advisability of Considering Pupils' Preferences.—The feeling that pupils would experience greater satisfaction if they liked

¹A Tentative Course of Study in English for Secondary Schools in Indiana, 1928.

²Mary Dye Beach, *A Study of the Classics Used in Indiana High Schools, 1928-29*. (Unpublished report to be found in the Indiana University Extension Division Office in Indianapolis.)

the selection tested seemed to have some bearing here; consequently, the list of seventy-four classics evaluated by Dr. C. S. Crow³ was studied, as was also the list of ratings evaluated by a study under the leadership of C. M. McConn.⁴

Dr. Crow's study included evaluations on seventy-four selections by 1,999 high school pupils in six states. The seventy-four selections were chosen for ranking on five scales, only two of which were considered in this study—(1) being "interesting and entertaining" and (2) "having moral value."

Eleven classics of the twelve ranking highest in Dr. Crow's study are among the twelve classics chosen for this study.

A study made by the Association of Teachers of English of Illinois under the leadership of Dr. C. M. McConn gave data on the ratings of forty-one classics on two points—the pupils' "liking for" and their "judgment of" the worth of the classic. The study includes 209 high schools, 5,803 pupils making ratings. Nine of the twelve classics used in this study are included in the twelve receiving the highest ratings on the Illinois study.

Comparison of the Indiana Course of Study in English with Courses of Large City Systems.—An examination of the courses of study in several large city school systems supported the judgment of the selections made in Dr. Crow's study and in the Illinois teachers' study. Three courses of study of particular value were those of San Francisco,⁵ Denver,⁶ and Pittsburgh.⁷

The Writer's Judgment.—Finally, the writer's own preference based on thirteen years' experience as critic teacher in English in the high school department of the Indiana State Teachers College at Terre Haute helped to determine the choice of classics.

THE TWELVE CLASSICS CHOSEN

The twelve classics chosen are as follows:

Five Novels:

1. *A Tale of Two Cities*

³Charles S. Crow, *Evaluation of English in the High School*, 1924.

⁴Bulletin of the Illinois Association of Teachers of English, 1912.

⁵Courses of Study in English found in Indiana State Teachers College library.

⁶*Ibid.*

⁷*Ibid.*

2. *Ivanhoe*
3. *Silas Marner*
4. *Treasure Island*
5. *The House of Seven Gables*

Five Shakespearian Plays:

1. *A Midsummer Night's Dream*
2. *As You Like It*
3. *Julius Caesar*
4. *Macbeth*
5. *Hamlet*

Two Long Poems:

1. *The Lady of the Lake*
2. *The Idylls of the King*
 - a. *The Coming of Arthur*
 - b. *Gareth and Lynette*
 - c. *The Holy Grail*
 - d. *Lancelot and Elaine*
 - e. *Guinevere*
 - f. *The Passing of Arthur*

Limiting the Study on the Twelve Classics.—Having determined upon the twelve classics to be used in this study, it was decided to limit the factors in the study of each classic to three: (1) the comprehension of plot; (2) the comprehension of character; and (3) the comprehension of social and ethical ideas which are conveyed directly or indirectly through the selection.

CHAPTER III

PROBLEM TWO—THE CONSTRUCTION OF TWELVE TESTS TO MEASURE PUPIL ACHIEVEMENT IN TWELVE ENGLISH CLASSICS

TEXTBOOK ANALYSIS OF EACH CLASSIC

An analysis was made of each classic dividing it into separate items based essentially on comprehension of plot, of character, and of social and ethical ideas inherent in it. Table I presents data for the analysis of the different classics and the separate items considered. In this table it is seen that a large number of pertinent items were prepared on each classic.

In analyzing each classic, three points were kept constantly in mind as determining the objectives in the interpretation of the classic. The first point considered was the recognition of all important facts used by the author for the essential purpose of illuminating the action in his plot, such as time, place, incidents, conditions, customs, etc. The second point considered the reactions, mental and physical, of the characters in the particular incidents selected by the author. The third point considered the author's evaluation of the reactions of his

characters by the criteria of conduct and behavior obtaining in that particular social group at the time the incidents in his production were imagined to take place.

These three points determined the selection of the test items which were later used in judging the achievement of high school pupils on their comprehension of the twelve classics. The majority of these items in each classic was concerned with plot elements, a smaller number with the characters of the selection, and a still

fifty high school teachers of English with the explanation of the purpose of the study and an earnest appeal for their cooperation. Specific directions for the marking of the items concerned with plot comprehension were included as follows:

"Place an 'A' before each statement you consider 'excellent' (absolutely essential for knowledge-content); a 'B' before each statement you consider 'fair' (adds something to knowledge-content); a 'C' before each statement you consider

TABLE I
ANALYSIS OF TWELVE CLASSICS FOR VALIDATION

No.	Classic	Items for Comprehension of			Total	No. Items Used in Test
		Plot	Char- acters	Social and Ethical Values		
				(1)	(2)	(3)
1. <i>Silas Marner</i> -----		115	28	30	173	110
2. <i>A Tale of Two Cities</i> -----		90	24	9	123	80
3. <i>Treasure Island</i> -----		125	23	14	162	85
4. <i>Ivanhoe</i> -----		80	23	10	113	67
5. <i>The House of Seven Gables</i> -----		48	15	14	77	75
6. <i>Macbeth</i> -----		22	22	10	54	70
7. <i>Hamlet</i> -----		61	18	9	88	66
8. <i>Julius Caesar</i> -----		42	32	15	89	50
9. <i>As You Like It</i> -----		28	19	9	56	60
10. <i>A Midsummer Night's Dream</i> -----		21	20	0	41	50
11. <i>The Lady of the Lake</i> -----		80	13	10	103	90
12. <i>The Idylls of the King</i> -----		124	29	17	170	101
Total					1249	904

smaller number with the social and ethical values of the classic.

This method of textbook analysis is accepted as a standardized procedure in determining the validation of test data.¹ It is especially valuable as determining what ought to be taught in English classics from the standpoint of social utility.

SECURING POOLED JUDGMENTS OF EXPERTS

All the items prepared by the method of textbook analysis were divided into three groups on the basis of the three points previously mentioned and submitted to

'poor' (unimportant for the purpose); and a 'D' before each statement you consider 'very poor' (should be omitted)."

The directions for the validation of character comprehension were as follows:

"In the following list of characters from (name of classic here), please put a '1' before the names of those you consider *very important* for the pupil to remember; a '2' before the names of those you consider *fairly important* for the pupil to remember; and a '3' before those *not important* for the pupil to remember."

In the attempt to realize the third objective of the tests, statements were made of some of the social and ethical principles which it was believed the pupils should experience directly, or vicariously, in the

¹G. M. Ruch and George D. Stoddard, *Tests and Measurements in High School Instruction*, pp. 305-7.

study of the particular classic, and an example from the classic given to illustrate the principle. The following directions were included for the validation of these principles:

"Place an 'A' before these statements which you think practically all pupils will experience (either directly or vicariously) at the time of the study; a 'B' before those which you think a majority of the pupils will experience; a 'C' before those which you think a few pupils will experience; and a 'D' before those which you think practically none of the pupils will experience."

The total number of items submitted to these experts in the English field was 1,249.

It was deemed a sufficiently reliable procedure statistically to accept the returns from fifty per cent of these experts; accordingly, as soon as twenty-five teachers returned the validated material, their judgments were tabulated. All statements concerning social and ethical principles which did not receive "A" or "B" ratings from a majority of the teachers were omitted as bases for test items. All characters which did not receive a rating of "1" or "2" from the majority of teachers were eliminated from the tests. The total number of test items secured through this method of validation was 904.

An official list of all the secondary English teachers in the state of Indiana² had been previously secured, giving the location of the teacher by county alphabetically, and including the school enrollment. From this list the names of fifty teachers were selected by choosing every tenth name beginning with the first, except where the enrollment factor was concerned—too many teachers from the large schools or too many from the small ones. This procedure was repeated for each of the twelve classics, the second classic selecting the next name on the list of teachers after the final one used on the first classic until the required data were obtained.

THE CONSTRUCTION OF THE TESTS

Twelve objective tests were then constructed on the basis of the analyzed items of each classic which had been validated by the pooled judgments of experts in the

field as well as by the standardized procedure of textbook analysis. Three hundred copies of each of the twelve tests were made.

In order to obtain a random sampling of the achievement of high school pupils, letters were sent out to English teachers in the state asking them if they cared to try out the tests. The procedure in sending out the letters was practically the same as that used in selecting teachers to validate the items analyzed on each classic. A self-addressed postal card including a list of the twelve classics used in the tests was inclosed. The response from teachers through the state was very satisfactory. Tests were sent to twenty-five high schools in eighteen counties in the state. Two thousand nine hundred and sixty-two (2,962) tests on the twelve classics were scored. A key was carefully made with the idea of speed in scoring and accuracy uppermost. The tests were scored by the writer and by several assistants, for the most part under her direct supervision.

It was thought to be a fairer representation of the pupil's work to allow him to omit a question rather than to guess at it when he was not sure of his answer. This procedure also indicated to the writer that the pupil's inability to give an answer might be caused by ambiguity or by a lack of clearness in the question, or statement.

In the "multiple choice" questions, only one reply was graded "+" because all the statements were correct and the pupil's judgment was tested here.

By way of a pupil check on the tests, the writer secured from some of the teachers who gave the tests an expression of the pupils' reaction to them. Four questions were suggested to which responses were made on the back of the test papers:

- (1) Are there any questions which can be answered in two ways? (Yes and No; False and True.) If so, indicate the test item by number.
- (2) Is the test very difficult if one has read the classic very carefully?
- (3) Does the test make you dislike this classic?
- (4) Do you like this type of test?

Point (1) was quite helpful in aiding

²Indiana School Directory, 1929-30.

the writer to find ambiguities wholly unsuspected. Each item criticized by any pupil was examined critically.

The pupils' answers to (2) and (3) were almost unanimously "No," and to (4) were as emphatically "Yes."

The objective test seems to have for high school pupils generally all the thrill and zest found in the popular crossword puzzle.

The eighteen counties in which tests were given are: Adams, Crawford, Elkhart,

liability coefficients for five standard education tests, 0.55, 0.70, 0.75, 0.80, and 0.90, given by Dr. W. A. McCall,⁴ and (2) the reliability ranges stated by Smith and Wright⁵ which are as follows:

A reliability coefficient ranging from .95 to .99 is seldom attained in standard tests.

.90 to .94 is highly desirable in testing. .80 to .89 represents some of the best tests now on the market.

.70 to .79 represents many tests now on

TABLE II
THE RELIABILITY OF THE TESTS

Classic	Number of items in test	Coefficient of Reliability
<i>A Tale of Two Cities</i> -----	80	.961 + .003
<i>Silas Marner</i> -----	110	.925 + .006
<i>The Idylls of the King</i> -----	101	.915 + .007
<i>As You Like It</i> -----	60	.895 + .009
<i>Treasure Island</i> -----	85	.892 + .010
<i>A Midsummer Night's Dream</i> -----	50	.854 + .012
<i>Hamlet</i> -----	66	.846 + .012
<i>Macbeth</i> -----	70	.834 + .012
<i>Ivanhoe</i> -----	67	.832 + .013
<i>The House of Seven Gables</i> -----	75	.812 + .016
<i>Julius Caesar</i> -----	50	.784 + .035
<i>The Lady of the Lake</i> -----	90	.697 + .020

Grant, Lake, Marion, Monroe, Morgan, Orange, Owen, Parke, Perry, Rush, St. Joseph, Sullivan, Tippecanoe, Vigo, and Warren.

THE RELIABILITY OF THE TESTS

Since only one form on each test was constructed, the reliability of each test was based upon the correlation of the scores made on the odd-numbered items with the scores made on the even-numbered items throughout each test. This method of self-correlation as a criterion for judging the reliability of standardized tests is explained in Smith and Wright's text *Tests and Measurements*.⁶

The reliabilities of the tests used in this study, obtained by the self-correlation method, are given in Table II.

Reliability coefficients established as standards for education tests, with which the reliabilities of the tests used in this study may be compared, are: (1) the re-

liability coefficients for five standard education tests, 0.55, 0.70, 0.75, 0.80, and 0.90, given by Dr. W. A. McCall,⁴ and (2) the reliability ranges stated by Smith and Wright⁵ which are as follows:

A reliability coefficient ranging from .95 to .99 is seldom attained in standard tests.

.90 to .94 is highly desirable in testing.

.80 to .89 represents some of the best tests now on the market.

.70 to .79 represents many tests now on

the market.

.69 and below is not satisfactory for individual measurement. Tests with such a reliability coefficient are used in group testing.

Only two of the twelve tests have a coefficient of reliability below .80, and the lowest of the twelve approximates .70 (.697 - .02). It would seem then that on the basis of the coefficient of reliability obtained by standardized procedure the tests may be accepted as reliable measures. Ten of the tests (those having coefficients of reliability above .80) might even be used for the testing of individuals for purposes of grade classification without danger of any serious mistake.

The attainment of a high coefficient of reliability on the tests seems to prove their validity as satisfactory measures for group testing.

⁴W. A. McCall, *How to Measure in Education*, p. 310.

⁵Smith and Wright, *op. cit.*, p. 37.

⁶H. L. Smith and W. W. Wright, *Tests and Measurements*, p. 37.

THE COMPUTATION OF STANDARD DEVIATIONS AND QUARTILE DEVIATIONS

Scores on all the tests were arranged according to a frequency distribution for each group on each classic. The standard deviation was computed for each group by the standard deviation formula:

$$\sigma = \sqrt{\frac{\sum x^2}{N}}$$

These standard deviations are uniform.

Quartile deviations were also computed for each group on each classic using the following formula:

$$Q_s = U. L. - \frac{(4 - f_{ds})}{f_{nx}} h$$

and

$$Q_l = L. L. - \frac{(4 - f_{up})}{f_{nx}} h$$

SOME FACTORS PROBABLY AFFECTING ACHIEVEMENT

All pupil achievement is affected by several factors. Among these outstanding factors are those of mental ability, age for grade placement, and time allowed for taking the tests. An attempt was made to correlate the scores made on the tests with the I.Q.'s of the various pupils taking the tests, with age, and with time (allowed for taking the test).

The correlations between Score and I.Q., Score and Time, Time and I.Q., and Score and Age seemed to be the most important and possibly the most indicative of factors possibly affecting the achievement on the classics.

All correlations between score and intelligence are positive, but the data are too meagre for significant conclusions.

Most of the correlations between score and time are negative. While these data are not significant, the conclusion seems to warrant the statement that time does not seem to be a factor in obtaining high scores.

The correlations between the factors of time and intelligence are mostly negative. The data seem to warrant the conclusion

that the higher the intelligence is, the shorter the time required for completing the test. If the poorer pupils were not given sufficient time on a test, their achievement might possibly be affected.

It is noticeable that the correlations between score and age are mostly negative. There is slight evidence that a correlation between score and age may be considered; the higher the age the lower the score, or vice versa, seems to be warranted without conclusion. The older pupils are probably the retarded pupils and would be naturally expected to make lower scores.

The conclusions from the meagre data obtained by a study of the correlations indicate that: mental ability as shown by the I.Q. is an important factor affecting achievement; that tests completed in a shorter time seem to contain the higher scores—the brighter the pupil, the shorter the time needed for the tests; the higher scores are made by the younger pupils—perhaps because the older pupils are often found to be retarded.

While these correlations are not submitted as being significant in this study, they do support the conclusions found in other studies where a random sampling of unselected groups of pupils is concerned.

No attempt was made to determine the specific time of these tests, lest the slow but accurate pupil might be necessarily penalized. In the directions sent to the teachers giving the tests, teachers were asked not to hurry the pupils but to have them work continuously. Unless the test is one in which speed is important—as in reading or typewriting—speed does not necessarily indicate greater power in the individual, but rather his individual mastery of a particular test situation. The point in these tests was mainly to ascertain the pupils' comprehension of what they read. If the tests were to be standardized, a time limit should be determined after a try-out in which the time required for a given number of items was computed.

SUMMARY

(1) Objective tests were constructed for twelve English classics.

(2) The validity of these tests was obtained (a) by the method of textbook analysis, (b) by pooled judgments of ex-

*G. M. Ruch, *The Objective or New Type Examination*, p. 424.

perts, (c) by comparison of the test scores of the "best" and the "poorest" pupils, and (d) by the attainment of a satisfactory coefficient of reliability.

(3) Ten tests have a satisfactory coefficient of reliability.

(4) Quartile deviations and standard deviations were computed for each test.

(5) These standard deviations are uniform.

(6) The probable error of the raw scores is low.

(7) All the data seem to warrant the conclusion that the tests are reliable measures for testing achievement on these classics.

TABLE III
ACHIEVEMENT BY PER CENT OF CORRECT REPLIES IN TESTS ON THE
TWELVE CLASSICS, ARRANGED BY GRADES

Classic	Grade	No. pupils	No. items in test	Possible no. of correct replies	No. of correct replies	Per cent
<i>A Tale of Two Cities</i>	9	26	80	2080	1810	87.02
	10	77		6160	4172	67.73
	11	133		10640	8798	82.69
	12	17		1360	990	72.69
<i>Ivanhoe</i>	9	139	67	9313	6782	72.82
	10	53		3551	2638	74.29
	11	74		4958	3749	75.62
<i>Silas Marner</i>	9	28	110	3080	2164	70.26
	10	168		18480	13630	72.67
	11	83		9130	7105	77.82
<i>The House of Seven Gables</i>	9	23	75	1725	1481	85.86
	10	146		10950	9395	85.80
	11	33		2475	2099	84.81
	12	23		1725	1568	90.90
<i>The Lady of the Lake</i>	9	259	90	23310	15955	68.40
<i>Treasure Island</i>	9	140	85	11900	7772	65.31
	11	33		2805	1695	60.43
<i>As You Like It</i>	9	85	60	5100	4405	86.37
	10	131		7860	6502	82.72
<i>Macbeth</i>	9	25	70	1750	840	48.00
	10	129		9030	5690	63.01
	11	85		5950	3953	66.44
<i>Hamlet</i>	11	100	66	6600	4845	73.40
	12	135		8910	5937	66.74
<i>Julius Caesar</i>	9	126	50	6300	4066	64.54
	10	151		7550	4953	65.60
<i>A Midsummer Night's Dream</i>	8	45	50	2250	1722	76.53
	9	205		10250	8595	83.85
<i>The Idylls of the King</i>	10	61	101 (or 70)	4270	3604	84.40
	11	197		19091	14505	75.98

CHAPTER IV

PROBLEM III—A STUDY OF ACHIEVEMENT

The preceding chapter assumes that the tests constructed by the statistical procedure used for standardizing tests are sufficiently valid and reliable measures for determining achievement on the content covered by these tests.

The present chapter presents data on the achievement of pupils (1) by the percentage of correct scores obtained; and (2) by the critical ratio of the difference in median scores and the probable error of this difference on two factors: (a) at different grade levels; and (b) by the length of the school term.

Table III shows the per cent of correct replies on the twelve classics arranged by grades.

The data in Table III were obtained by classifying the total number of "+" replies, or correct answers, on each test by each group of pupils according to their grade. All the totals of correct replies for all groups of a particular grade were totaled on each classic, this grand total then representing the total number of correct replies for each grade. The sum of all the pupils of one particular grade tested on a classic equals the number of pupils tested on a classic in one grade. The number of items in the test multiplied by the total number of pupils in a grade equals the possible number of correct replies for a grade on any classic-test.

The per cent the number of correct replies is of the possible number of replies for any grade equals the per cent of achievement for that particular grade on a classic. For instance, Table III shows that the per cent of achievement for the ninth grade on *A Tale of Two Cities* is 87.02; for the tenth grade, 67.73; for the eleventh grade, 82.69; and for the twelfth grade, 72.69.

DISCUSSION OF THE DATA SHOWN IN TABLE III

A Tale of Two Cities.—The ninth grade has the highest per cent of achievement, but the number of pupils is small. The eleventh grade achievement is more satisfactory from the group standpoint.

Ivanhoe.—The overlapping of each of these grades, ninth and tenth, on the next

one is important as showing the closeness of ability in the three grades.

Silas Marner.—The range of ability is close in the ninth, tenth, and eleventh grades.

The House of Seven Gables.—The ninth and tenth grades seem to be about equal in ability. The twelfth grade with the same number of pupils as the ninth shows its superiority. These percentages are very high.

Treasure Island.—The ninth grade seems to be the grade in which this classic should be taught.

As You Like It.—The achievement in this classic is quite satisfactory. It should be taught in either ninth or tenth grade.

Macbeth.—The achievement in this classic is not very satisfactory. The percentage made by the ninth grade (48.00) is the lowest of all grades on all tests. *Macbeth* should not be taught in the ninth grade. Eleventh grade achievement is satisfactory, but twelfth grade is better in the writer's opinion.

Hamlet.—The achievement on this classic is satisfactory. *Hamlet* gives best results in the twelfth grade.

Julius Caesar.—The achievement in both ninth and tenth grades seems satisfactory.

A Midsummer Night's Dream.—The achievement in both eighth and ninth grades is high.

The Lady of the Lake.—The achievement on this classic is quite satisfactory. Ninth or tenth grade placement should give adequate returns.

The Idylls of the King.—These percentages are high on both groups—four *Idylls* and six *Idylls*. The twelfth grade is better because of the maturity of the pupils.

SUMMARY OF TABLE III

(1) The lowest percentage obtained is 48.00 made by a ninth grade class on *Macbeth*.

(2) The second lowest score is 60.43 made by an eleventh grade class on *Treasure Island*.

(3) The highest score is 90.90 made by a twelfth grade class on *The House of Seven Gables*.

(4) The other percentages are as follows:

$$\begin{aligned}
 48\% - 60\% &= 1 \text{ group} \\
 61\% - 70\% &= 9 \text{ groups} \\
 71\% - 80\% &= 10 \text{ groups} \\
 81\% - 90\% &= 9 \text{ groups} \\
 90\% - &= 1 \text{ group}
 \end{aligned}$$

The ratio between the difference of the medians of the various groups and the probable error of this difference is a measure which determines whether the dif-

COMPARISON OF MEDIAN ON TESTS IN TWELVE CLASSICS

Comparison of Achievement on the Test of A Tale of Two Cities.—Table IV presents a comparison of the medians on *A Tale of Two Cities* by grade levels.

There is a significant difference between ninth and tenth grade achievement in favor of the ninth grade.

There is a slight difference between the

TABLE IV
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *A TALE OF TWO CITIES*

Grade	Median	+	P.E. Mdn.	Grades compared	Diff. in Medians	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	71.17	+	1.22	9-10	15.42	9	1.72	9.97
10	55.75	+	1.22	9-11	3.47	9	1.33	2.57
11	67.75	+	0.53	9-12	11.17	9	2.39	4.67
12	60.00	+	2.05	10-11	12.00	11	1.33	9.03
				10-12	4.25	12	2.39	1.78
				11-12	7.75	11	2.12	3.65

ference in the medians compared is significant and is called in this study the significant ratio.

Garrett¹ shows that this ratio must be as great as four (4) in order to indicate that the difference is a true difference and therefore significant.

By the term "grade level" is meant the secondary school grade in which the test was

ninth and eleventh grade achievement in favor of the ninth grade, but the difference is not significant.

There is a significant difference between the ninth and twelfth grade achievement in favor of the ninth grade.

There is a significant difference between the tenth and eleventh grade achievement in favor of the eleventh grade.

TABLE V
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *IVANHOE*

Grade	Median	+	P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. diff.	Signi- ficant ratio
9	49.75	+	0.61	9-10	1.37	10	0.93	1.46
10	51.12	+	0.70	9-11	1.75	11	0.95	1.84
11	51.50	+	0.73	10-11	0.38	11	1.01	.376

taken—i.e., the ninth, tenth, eleventh, or twelfth grade.

A comparison of these schools on the basis of enrollment was attempted, but the conclusions were not significant enough to warrant the consideration of the enrollment factor.

¹H. E. Garrett, *Statistics in Psychology and Education*, p. 133.

The difference between the tenth and twelfth grade achievement is not significant.

These data would seem to warrant the placement of *A Tale of Two Cities* in the ninth grade.

Comparison of Achievement on the Test of Ivanhoe.—Table V gives the data for the

TABLE VI
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR
THE TEST ON *SILAS MARNER*

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in medians	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	81.00	+ 1.95	9-10	3.93	10	2.64	1.49
10	84.93	+ 0.66	9-11	11.25	11	2.33	4.73
11	92.25	+ 1.27	10-11	7.32	11	1.43	5.50

comparison of achievement on the test of *Ivanhoe* by grade levels.

The difference between ninth and tenth grade achievement is not significant.

The difference between ninth and eleventh grade achievement is not significant.

Both ninth and tenth grade achievement is slightly better than that of the

grade achievement on the test of *Silas Marner* is not significant.

The difference between ninth and eleventh grade achievement is significant and favors the eleventh grade.

The difference between tenth and eleventh grade achievement is significant and is in favor of the eleventh grade.

TABLE VII
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE
TEST ON *THE HOUSE OF SEVEN GABLES*

Grades	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdn.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
10	66.14	+ 0.33	10-12	2.73	12	0.69	3.96
12	68.87	+ 0.61					

eleventh grade, but the difference is not significant.

Mrs. Burch² says: *Ivanhoe*: "A joint consideration of its interest and difficulty values would place it in the eleventh grade."

From these data it would seem that *Silas Marner* should be taught in the eleventh grade.

Comparison of Achievement on the Test of The House of Seven Gables, by grade

TABLE VIII
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE
TEST ON *TREASURE ISLAND*

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	57.50	+ 0.92	9-10	7.50	9	1.61	4.67
	50.00	+ 1.32					

The writer agrees with Mrs. Burch's conclusion.

Comparison of Achievement on the Test of Silas Marner.—Table VI indicates that the difference between ninth and tenth

levels.—Table VII presents the necessary data for comparison of achievement on the classic, *The House of Seven Gables*, by grade levels.

The difference between tenth and twelfth grade achievement seems to be significant and is in favor of the twelfth grade.

It would seem that *The House of*

²Mary C. Burch, *Determination of a Content of the Course in Literature, etc.* Dept. of Education of Stanford University, 1927, p. 276.

Seven Gables should be taught in the upper grades (eleventh and twelfth grades) because of its lack of action, its seriousness, and its psychology.

Comparison of Achievement on the Test of Treasure Island.—The achievement of

As You Like It is taught in the ninth grade or the tenth grade.

Comparison of Achievement on the Test of Macbeth.—Data for the comparison of the three grades in which *Macbeth* was

TABLE IX
THE SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *AS YOU LIKE IT*

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	53.14	+ 0.49	9-10	1.54	9	0.71	2.16
10	51.56	+ 0.52					

two grades on this classic is compared in Table VIII.

The difference between ninth and tenth grade achievement in *Treasure Island* is significant and is in favor of the ninth grade.

tested are presented for a comparison in Table X.

The difference in achievement in the ninth, eleventh, and twelfth grades is significant and warrants the placing of this classic in the eleventh grade.

TABLE X
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *MACBETH*

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	34.75	+ 1.06	9-11	9.04	11	1.21	7.46
11	43.79	+ 0.58	9-12	13.14	12	1.17	11.23
12	47.89	+ 0.50	11-12	4.10	12	0.76	5.40

Comparison of Achievement on the Test of As You Like It.—Factors for this comparison are presented in Table IX.

Table IX indicates that the difference between ninth and tenth grade achievement

Comparison of Achievement on the Test of Hamlet.—Factors for this comparison are presented in Table XI.

Table XI shows that the difference between eleventh and twelfth grade achieve-

TABLE XI
SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *HAMLET*

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
11	48.35	+ 0.55	11-12	4.35	11	0.81	5.37
12	44.00	+ 0.60					

seems to favor the ninth grade slightly, but the difference is not significant.

These data would seem to indicate that it would make very little difference whether

ment is in favor of the eleventh grade and is significant.

Comparison of the achievement on Hamlet from the data given shows that this

classic should probably be placed in the eleventh grade.

Comparison of Achievement on the Test of Julius Caesar.—Table XII presents a comparison of the medians on *Julius Caesar*

be placed correctly in the ninth grade of the secondary school.

Comparison of Achievement on the Test of The Lady of the Lake.—Table XIV presents a comparison of the medians on *The*

TABLE XII

SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON JULIUS CAESAR

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	33.36	+ 0.40	9-10	0.42	9	0.74	0.57
10	32.94	+ 0.62					

by grade levels.

Comparison of the medians on *Julius Caesar* indicates that the difference between ninth and tenth grade achievement is not significant. The grade placement

Lady of the Lake, by grade levels.

The difference between ninth and tenth grade achievement on *The Lady of the Lake* is not significant. This fact would seem to warrant the placing of this classic in

TABLE XIII

SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON A MIDSUMMER NIGHT'S DREAM

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
8	39.63	+ 1.15	8-9	3.64	9	1.18	3.07
9	43.27	+ 0.28					

could be either in the ninth or the tenth grade.

Comparison of Achievement on the Test of A Midsummer Night's Dream.—Data for this comparison are presented in Table XIII.

either the ninth or the tenth grade. Mrs. Burch² says, "For the upper one-fourth of the ninth grade *The Lady of the Lake* is optimum material."

Comparison of Achievement on the Test of the Idylls of the King.—Table XV gives

TABLE XIV

SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON THE LADY OF THE LAKE

Grade	Median	+ P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
9	62.33	+ 0.62	9-10	0.67	10	0.32	2.09
10	63.00	+ 0.94					

The difference between eighth and ninth grade achievement on *A Midsummer Night's Dream* favors the ninth grade, but it is not significant.

It would seem from this comparison made by grades that this classic might

data for a comparison of the achievement by the tenth and eleventh grades on the test of *The Idylls of the King* which contained 101 items.

²Mrs. Burch, *op. cit.*, p. 267.

TABLE XV

SIGNIFICANCE OF THE DIFFERENCE OF MEDIAN BY GRADES FOR THE TEST ON *THE IDYLLS OF THE KING*

Grade	Median	+	P.E. Mdn.	Grades compared	Diff. in Mdns.	Fa- vor of	P.E. Diff.	Signi- ficant ratio
10	61.00	+	1.07	10-11	16.42	11	1.38	11.89
11	77.42	+	0.87					

The difference between tenth and eleventh grade achievement in *The Idylls of the King* favors the eleventh grade, and this difference is quite significant.

It would seem justifiable to place *The Idylls of the King* in the eleventh grade.

SUMMARY OF TABLES ON ACHIEVEMENT

Assuming that the performance indicated by the median is a typical indication of the achievement of the group, the data presented previously in this study substantiate the following statements:

(1) For *A Tale of Two Cities* there is a very significant difference between the medians of the ninth grade and those grades above the ninth grade. This difference is in favor of the ninth grade. These facts seem to warrant the placement of *A Tale of Two Cities* in the ninth grade.

(2) For *Ivanhoe* there is no significant difference between the achievement of the ninth, tenth, and eleventh grades. The writer would place *Ivanhoe* in the eleventh grade.

(3) For *Silas Marner* there is a significant difference of medians in favor of the eleventh grade. *Silas Marner* should be taught in the eleventh grade.

(4) For *The House of Seven Gables* a slightly significant difference is indicated in favor of the twelfth grade, and placement of this classic in the twelfth seems to be warranted.

(5) For *Treasure Island* there is a significant difference in achievement by grades in favor of the ninth grade.

(6) For *As You Like It* there is no significant difference in the achievement by the ninth and tenth grades; however, grade placement favors the ninth grade because the ninth grade achievement is the higher. This drama is not too difficult for the ninth grade.

(7) For *Macbeth* there is a very significant difference in the achievement of the ninth, eleventh, and twelfth grades. This difference favors the eleventh grade and justifies placing *Macbeth* in the upper grades (eleventh or twelfth).

(8) For *Hamlet* there is indicated a significant difference in achievement in favor of the eleventh grade, warranting the teaching of *Hamlet* in the eleventh grade. The writer prefers the twelfth grade for this classic after many years of experience in teaching it.

(9) For *Julius Caesar* there is no significant difference in achievement. The data indicate that this classic may be taught equally well in either the ninth or the tenth grade.

(10) For *A Midsummer Night's Dream* the data indicate warrantable placement in the ninth grade.

(11) For *The Lady of the Lake* greater achievement is found in the tenth grade but there is no significant difference between the achievement of the tenth grade and that of the ninth grade. Although this classic could be properly placed in either grade, the tenth grade would probably be the better.

(12) For *The Idylls of the King* the achievement is significantly better in the eleventh grade. This classic should be taught in the eleventh grade. There is found no significant difference in the performance on the test on *The Idylls of the King* between the tenth and eleventh grades. From the standpoint of its social value, the writer would place this classic in the eleventh or the twelfth grade, preferably the latter.

SUMMARY

- (1) The percentage of achievement:
 - a. The percentage of achievement on

these tests is high. Twenty-one out of thirty groups of pupils attain an average of seventy per cent.

- b. Nine groups attain an average of eighty-two per cent.
- c. Five groups attain eighty-five per cent or better.

(2) The allocation of the classics as determined by this study accords very closely with the suggestions of the State Course of Study and with one other study of the placement of classics in the secondary school.

(3) The achievement in long-term schools

of secondary school pupils on these classics on three phases: (a) the comprehension of plot, (b) the comprehension of character, and (c) the comprehension of social and ethical values in the classic; and (3) the study of the achievement made on these tests by secondary school pupils on two factors: (a) achievement at different grade levels, and (b) achievement in long- *versus* short-term schools.

The nature of literature and the aims in teaching literature were determined by the concensus of opinion of many experts in the field of literature and of education. Twelve classics were chosen for this study

TABLE XVI
COMPARISON OF GRADE PLACEMENT IN THIS STUDY WITH GRADE PLACEMENT SET BY TWO OTHER STUDIES

No.	Classic	Grade of highest achievement in this study	Ind. St. Course place-ment grade	Grade placement according to Mrs. Beach's study
1.	<i>A Tale of Two Cities</i>	9	10 or 11	9, (10), 11, 12
2.	<i>Ivanhoe</i>	11	9, 10, 11	(9), 10, 11, 12
3.	<i>Silas Marner</i>	11	11 (or earlier)	9, 10, (11), 12
4.	<i>The House of Seven Gables</i>	12	11	9, 10, (11), 12
5.	<i>Treasure Island</i>	9	9	(9), 10
6.	<i>As You Like It</i>	9	9	(9), 10, 11
7.	<i>Macbeth</i>	12	12	10, 11, (12)
8.	<i>Hamlet</i>	11	12	10, 11, (12)
9.	<i>Julius Caesar</i>	9	9	(9), 10
10.	<i>A Midsummer Night's Dream</i>	9	No data	(9), 11, 12
11.	<i>The Lady of the Lake</i>	10	9	(9), 10
12.	<i>The Idylls of the King</i>	11 (6 Idylls) 10 (4 Idylls)		9, (10), 11, 12

is appreciably better than that in short-term schools. On nine of the twelve classics in which there were comparable data by length of school term, the long-term schools have a higher achievement.

CHAPTER V

CONCLUSION

The purpose in this final chapter is to review the problems of this study and to summarize briefly some conclusions drawn from the study.

Three problems were attempted for solution: (1) the selection of twelve classics in the field of literature in the secondary school; (2) the construction of twelve objective tests to measure the achievement

which seemed most potent in supplying these values in literature.

The validity of the twelve objective tests made on these classics was determined by four standardized methods. The reliability of each test is satisfactory for group testing.

The percentage of achievement of each group of pupils on each classic was determined by the number of correct responses made on each test. Only three of the thirty groups in the final totals made a percentage below 64.54.

The study of the achievement of these pupils at different grade levels determined the grade placement for the classic in this study. The allocation of the twelve classics

for the ninth, tenth, eleventh, and twelfth grades is shown in Table XVI and is in accord with the allocation suggested in the State Course of Study in English.

The achievement of pupils in the long-term schools is significantly better than that in the short-term schools.

The following outstanding facts were revealed by the study of achievement:

- a. The range of ability in each grade group is large.
- b. There is much overlapping in all grades.

c. The ability of the class should determine the classics selected for teaching.

d. Other criteria should be obtained for purposes of correlation with pupil achievement in their studies. Intelligence quotients for all pupils and scores on rate and comprehension tests in reading would be valuable for comparison in the study of achievement in English.

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CORRECTION

Volume X, Number 1, p. 11—The last sentence of the next to last paragraph on this page should have read: "The median age of the most recent six at graduation was twenty-three, while that of the other eighteen was twenty-four and a half."



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